

WEST Search History

DATE: Monday, August 26, 2002

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side by side			result set
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L6	L5 and (cell cycle or cell division)	5	L6
L5	L4 and transgenic	14	L5
L4	L2 and plant	47	L4
L3	L2 and plant\$	47	L3
L2	brassinosteroid	49	L2
L1	dwf4 or dwarf4 or dwarf 4	0	L1

END OF SEARCH HISTORY

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NEWS 7 Apr 22 BIOSIS Gene Names now available in TOXCENTER
NEWS 8 Apr 22 Federal Research in Progress (FEDRIP) now available
NEWS 9 Jun 03 New e-mail delivery for search results now available
NEWS 10 Jun 10 MEDLINE Reload
NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22 USAN to be reloaded July 28, 2002;
saved answer sets no longer valid
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NEWS 15 Jul 30 NETFIRST to be removed from STN
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NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 09 JAPIO to be reloaded August 25, 2002
NEWS 20 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
now available on STN
NEWS 21 Aug 19 IFIPAT, IFICDB, and IFIUIDB have been reloaded
NEWS 22 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 23 Aug 26 Sequence searching in REGISTRY enhanced

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=> s dwfr or dwarf4 or dwarf 4
L1 17 DWFR OR DWARF4 OR DWARF 4

=> s dwf4 or dwarf4 or dwarf 4
L2 29 DWF4 OR DWARF4 OR DWARF 4

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 16 DUP REM L2 (13 DUPLICATES REMOVED)

=> d 1-16 ti

L3 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS
TI Brassinosteroid-regulated gene expression

L3 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
TI Analysis of carbohydrate metabolism of CPD antisense plants and the
brassinosteroid-deficient cbb1 mutant

L3 ANSWER 3 OF 16 AGRICOLA DUPLICATE 2
TI Selective interaction of triazole derivatives with **DWF4**, a
cytochrome P450 monooxygenase of the Brassinosteroid biosynthetic pathway,
correlates with brassinosteroid deficiency in planta.

L3 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
TI Overexpression of **DWARF4** in the brassinosteroid biosynthetic
pathway results in increased vegetative growth and seed yield in
Arabidopsis

L3 ANSWER 5 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Transcriptional regulation of genes encoding brassinosteroid biosynthetic
enzymes during tracheary element differentiation in Zinnia.

L3 ANSWER 6 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Analysis of the gene expression in response to brassinosteroids by using
Gene Chip.

L3 ANSWER 7 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI A novel brassinosteroid signaling component DWF12.

L3 ANSWER 8 OF 16 CAPLUS COPYRIGHT 2002 ACS
TI Protein and cDNA sequences of Arabidopsis **DWF4** gene encoding a
cytochrome P450 that mediates multiple 22.alpha.-hydroxylation steps in
brassinosteroid biosynthesis, and uses thereof

L3 ANSWER 9 OF 16 AGRICOLA DUPLICATE 4
TI The Arabidopsis dwarf1 mutant is defective in the conversion of

24-methylencholesterol to campesterol in brassinosteroid biosynthesis.

- L3 ANSWER 10 OF 16 AGRICOLA DUPLICATE 5
TI The **DWF4** gene of arabidopsis encodes a cytochrome P450 that mediates multiple 22 alpha-hydroxylation steps in brassinosteroid biosynthesis.
- L3 ANSWER 11 OF 16 AGRICOLA DUPLICATE 6
TI An arabidopsis brassinosteroid-dependent mutant is blocked in cell elongation.
- L3 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 7
TI Decreased muscle cell proliferation in chicks with a deletion in the GH receptor gene
- L3 ANSWER 13 OF 16 AGRICOLA DUPLICATE 8
TI Phenotypic characterization of the **dwarf-4** mutant of lettuce.
- L3 ANSWER 14 OF 16 AGRICOLA DUPLICATE 9
TI Rht1 and Rht2 semidwarf genes effect on hybrid vigor and agronomic traits of wheat.
- L3 ANSWER 15 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI THREE NEW ANALOGOUS MUTATIONS IN XENOPUS-LAEVIS.
- L3 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2002 ACS
TI Biological effects of .gamma.-ray from cesium-137. Part II.

=> d 4 au

- L3 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
AU Choe, Sunghwa; Fujioka, Shozo; Noguchi, Takahiro; Takatsuto, Suguru; Yoshida, Shigeo; Feldmann, Kenneth A.

=> d 4 so

- L3 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3
SO Plant Journal (2001), 26(6), 573-582
CODEN: PLJUED; ISSN: 0960-7412

=> d 1-3 ab

- L3 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2002 ACS
AB Major brassinosteroid (BR) effects such as BR-induced growth are mediated through genomic pathways because RNA synthesis inhibitors and protein synthesis inhibitors interfere with these processes. A limited no. of BR-regulated genes have been identified hitherto. The majority of genes (such as BRU1, CycD3, Lin6, OPR3, and TRIP-1) were identified by comparisons of BR-treated vs. control-treated plants. However, altered transcript levels after BR application may not reflect normal physiol. events. A complementary approach is the comparison of BR-deficient plants vs. wild-type plants. No artificial treatments interfere with endogenous signaling pathways, but a subset of phenotypic alterations of phytohormone-deficient plants most probably is secondary. To identify genes that are subject to direct BR regulation, we analyzed CPD antisense and dwf1-6 (cbb1) mutant plants. Both show a mild phenotype in comparison with BR-deficient mutants such as cpd/cbb3, det2, and **dwf4**. Plants were grown under two different environments to filter out BR deficiency effects that occur only at certain environmental conditions. Finally, we established expression patterns after BR treatment of

wild-type and dwf1-6 (cbb1) plants. Ideally, a BR-regulated gene displays a dose-response relationship in such a way that a gene with decreased transcript levels in BR-deficient plants is BR inducible and vice versa. Expression profile anal. of above ground part of plants was performed by means of Affymetrix Arabidopsis Genome Arrays.

L3 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
AB Brassinosteroids (BRs) are essential regulators of growth and development. BR-deficient mutants such as cpd/cbb3 and dwf4 display extreme dwarfism due to a failure in cell elongation. To avoid the severe pleiotropic effects caused by the extreme growth defect, transgenic Arabidopsis lines carrying a construct for antisense inhibition of CPD gene expression were established and subjected to physiol. anal. The CPD-antisense (.alpha.-CPD) lines display characteristic phenotypic alterations of BR-deficient plants such as reduced stem and petiole growth, smaller leaves, and a slightly delayed development. The obsd. changes are intermediate between the corresponding loss-of-function mutant (cbb3) and wild-type plants. In the present study, the primary carbon metab. of the transgenic lines as well as the BR-deficient cbb1 (dwf1-6/dim) mutant was analyzed. Gas exchange measurements indicated a reduced assimilatory capacity of the .alpha.-CPD plants. Soil-grown .alpha.-CPD as well as cbb1 (dwf1-6) mutant plants show a clear redn. in starch content. The metabolic alterations are accompanied by altered enzyme activities such as reduced invertase and cytosolic .beta.-amylase activity, and altered expression patterns of genes such as Athfruct1, Asus1, and ct-Bmy (encoding a cell wall invertase, sucrose synthase, and plastidic .beta.-amylase, resp.). The impaired carbon assimilation, as well as the altered enzyme activities and gene expression patterns in the .alpha.-CPD and cbb1 (dwf1-6) plants, demonstrate the necessity of normal CPD and DIM expression for proper carbon uptake and metab. and may point to an essential function of BRs. The impaired growth of BR-deficient plants may be (at least in part) due to reduced photosynthesis.

L3 ANSWER 3 OF 16 AGRICOLA DUPLICATE 2

=> d 3 so

L3 ANSWER 3 OF 16 AGRICOLA DUPLICATE 2
S0 The Journal of biological chemistry, July 13, 2001. Vol. 276, No. 28. p. 25687-25691
Publisher: Bethesda, Md. : American Society for Biochemistry and Molecular Biology.
CODEN: JBCHA3; ISSN: 0021-9258

=> d 6 ab

L3 ANSWER 6 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

=> d 6 so

L3 ANSWER 6 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
S0 Plant and Cell Physiology, (2001) Vol. 42, No. Supplement, pp. s81. print.
Meeting Info.: Symposia and Workshops of the 2001 Annual Meeting of the Japanese Society of Plant Physiologists Fukuoka, Japan March 23-26, 2001
Japanese Society of Plant Physiologists
. ISSN: 0032-0781.

=> d 7 ab

L3 ANSWER 7 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

=> d 7 so

L3 ANSWER 7 OF 16 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
S0 Development Growth & Differentiation, (July, 2001) Vol. 43, No.
Supplement, pp. S15. print.
Meeting Info.: 14th International Congress of Developmental biology Kyoto,
Japan July 08-12, 2001
ISSN: 0012-1592.

=> d 10 ab

L3 ANSWER 10 OF 16 AGRICOLA DUPLICATE 5
AB **dwarf4 (dwf4)** mutants of Arabidopsis display a dwarfed
phenotype due to a lack of cell elongation. Dwarfism could be rescued by
the application of brassinolide, suggesting that **DWF4** plays a
role in brassinosteroid (BR) biosynthesis. The **DWF4** locus is
defined by four mutant alleles. One of these is the result of a T-DNA
insertion. Plant DNA flanking the insertion site was cloned and used as a
probe to isolate the entire **DWF4** gene. Sequence analysis
revealed that **DWF4** encodes a cytochrome P450 monooxygenase with
43% identity to the putative Arabidopsis steroid hydroxylating enzyme
CONSTITUTIVE PHOTOMORPHOGENESIS AND DWARFISM. Sequence analysis of two
other mutant alleles revealed deletions or a premature stop codon,
confirming that **DWF4** had been cloned. This sequence similarity
suggests that **DWF4** functions in specific hydroxylation steps
during BR biosynthesis. In fact, feeding studies utilizing BR
intermediates showed that only 22 alpha-hydroxylated BRs rescued the
dwf4 phenotype, confirming that **DWF4** acts as a 22
alpha-hydroxylase.

=> d 10 so

L3 ANSWER 10 OF 16 AGRICOLA DUPLICATE 5
S0 The Plant cell, Feb 1998. Vol. 10, No. 2. p. 231-243
Publisher: [Rockville, MD : American Society of Plant Physiologists,
c1989-
CODEN: PLCEEW; ISSN: 1040-4651

=> d 13 ab

L3 ANSWER 13 OF 16 AGRICOLA DUPLICATE 8

=> d 13 so

L3 ANSWER 13 OF 16 AGRICOLA DUPLICATE 8
S0 Canadian journal of botany = Journal canadien de botanique, Oct 1994. Vol.
72, No. 10. p. 1541-1549
Publisher: Ottawa : National Research Council of Canada, 1951-
CODEN: CJBOAW; ISSN: 0008-4026
Gov. Source: Federal

=> s l1 and control element

L4 0 L1 AND CONTROL ELEMENT

=> s l1 and (promoter or intron or transcription terminator or utr)

L5 2 L1 AND (PROMOTER OR INTRON OR TRANSCRIPTION TERMINATOR OR UTR)

=> d 1-2 ti

L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS
TI Overexpression of **DWARF4** in the brassinosteroid biosynthetic pathway results in increased vegetative growth and seed yield in Arabidopsis

L5 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Overexpression of **DWARF4** in the brassinosteroid biosynthetic pathway results in increased vegetative growth and seed yield in Arabidopsis.

=> s l1 and (promoter or intron or transcription terminator or utr)
L6 2 L1 AND (PROMOTER OR INTRON OR TRANSCRIPTION TERMINATER OR UTR)

=> s brassinosteroid and transgenic
L7 0 BRASSINSTEROID AND TRANSGENIC

=> s brassinosteroid and transgenic
L8 39 BRASSINOSTEROID AND TRANSGENIC

=> s l5 and plant?
L9 2 L5 AND PLANT?

=> del l9 y

=> s l8 and plant?
L9 39 L8 AND PLANT?

=> dup rem l9
PROCESSING COMPLETED FOR L9
L10 29 DUP REM L9 (10 DUPLICATES REMOVED)

=> d 1-10 ti

L10 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2002 ACS
TI Chimeric RRK **plant** receptors useful for modulating **plant** responses to pathogens

L10 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2002 ACS
TI Arabidopsis dwf7 alleles of the STE1 gene defective in the .DELTA.7 sterol C-5 desaturation in **brassinosteroid** biosynthesis

L10 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2002 ACS
TI Cloning, characterization and use of pea cytochrome P 450 hydroxylase involved in **brassinosteroid** biosynthesis of **plants**

L10 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
TI Analysis of carbohydrate metabolism of CPD antisense **plants** and the **brassinosteroid**-deficient cbb1 mutant

L10 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2002 ACS
TI BRI1/BAK1, a receptor kinase pair mediating **brassinosteroid** signaling

L10 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2
TI Characterisation of BRH1, a **brassinosteroid**-responsive RING-H2 gene from Arabidopsis thaliana

L10 ANSWER 7 OF 29 CAPLUS COPYRIGHT 2002 ACS
TI Cloning of rice OsBRI1 gene and its use in regulation of **plant** growth and development in **transgenic plant**

L10 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2002 ACS
 TI DNA constructs encoding chimeric **plant** RRK receptors (Bril::Xa21 and Hevein::Xa21), and their use in production of **transgenic plants**

L10 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2002 ACS
 TI cDNA and protein sequence of a **brassinosteroid** response factor from rice and their uses in regulation of **plant** development

L10 ANSWER 10 OF 29 AGRICOLA
 TI BRS1, a serine carboxypeptidase, regulates BRI1 signaling in Arabidopsis thaliana. [Erratum: June 5, 2001, v. 98 (12), p. 6981.]

=> d 3 ab

L10 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2002 ACS
 AB The present invention provides a pea cDNA mol. encoding a cytochrome P 450 that catalyzes the **brassinosteroid** (BR) biosynthesis through C-2 hydroxylations in **plants**. The encoded amino acid sequence of the cytochrome P 450 is also provided. The small G protein Pra2 specifically interacts with the cytochrome P 450. The P 450 is dark-inducible and predominantly expressed in the rapidly elongating region of the epicotyls, like the Pra2. The Pra2 and cytochrome P 450 proteins are colocalized to endoplasmic reticulum (ER). The authors named the cytochrome P 450 as DDWF1 (Dark-induced DWF-like protein 1). **Transgenic plants** with reduced Pra2 exhibits dwarfish hypocotyls in the dark, which is completely rescued by BR but not by other growth hormones. The cytochrome P 450 DDWF1 mediates multiple 0-2 hydroxylations in the BR biosynthesis. **Transgenic plants** overexpressing the cytochrome P 450 show elongated stems even in the light, which phenocopies the hypocotyls of dark-grown seedlings. These results indicate that the Pra2 is a light-regulated mol. switch that regulates the hypocotyl elongation in etiolated seedlings through interaction with the cytochrome P 450 DDWF1. The cytochrome P 450 DDWF1 exhibits a C-2 hydroxylase activity that is specific to the conversions from typhasterol to castasterone and from 6-deoxotyphasterol to 6-deoxocastasterone. The invention also describes the methods and processes for generating expression cassettes and plasmids and for the use of these expression cassettes and plasmids to synthesize the cytochrome P 450 DDWF1 or biol. active fragments of such an enzyme. The invention can be utilized to improve or decrease the stem growth of **transgenic plants** contg. the nucleic acid mol. so that they exhibit improved growth rate and resistance to environmental stress and to identify other proteins involved in the **brassinosteroid** biosynthesis and in the **plant** growth regulation.

=> d 3 so

L10 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2002 ACS
 SO Eur. Pat. Appl., 26 pp.
 CODEN: EPXXDW

=> d 3 pi

L10 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2002 ACS

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1209227	A2	20020529	EP 2001-305677	20010629
	EP 1209227	A3	20020605		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

=> s l2 and (cell division or cell cycle)
L11 3 L2 AND (CELL DIVISION OR CELL CYCLE)

=> dup rem l11
PROCESSING COMPLETED FOR L11
L12 2 DUP REM L11 (1 DUPLICATE REMOVED)

=> d 1-2 ti

L12 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
TI Analysis of the gene expression in response to brassinosteroids by using Gene Chip.

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
TI Decreased muscle cell proliferation in chicks with a deletion in the GH receptor gene

=> d kwic

L12 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
IT Methods & Equipment
Gene Chip: genetic method
IT Miscellaneous Descriptors
cell division; cell elongation; gene expression;
photomorphogenesis; Meeting Abstract
GEN B6OX gene; CPD gene; DWF4 gene; XET genes [endotransglycosylase genes]

=> d ab

L12 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

=> s l2 and promoter
L13 3 L2 AND PROMOTER

=> dup rem l13
PROCESSING COMPLETED FOR L13
L14 2 DUP REM L13 (1 DUPLICATE REMOVED)

=> d 1-2 ti

L14 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
TI Overexpression of DWF4 in the brassinosteroid biosynthetic pathway results in increased vegetative growth and seed yield in Arabidopsis

L14 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2002 ACS
TI Protein and cDNA sequences of Arabidopsis DWF4 gene encoding a cytochrome P450 that mediates multiple 22.alpha.-hydroxylation steps in brassinosteroid biosynthesis, and uses thereof